



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:	)	
	)	
Tian, Dong	)	Examiner: Reddick, Marie L.
	)	
Serial No.: 10/052,038	)	Art Unit: 1713
	)	
Filed: January 17, 2002	)	Confirmation No.: 1256
	)	
For: WATERBORNE COATINGS	)	Docket No.: 0101

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION UNDER 37 C.F.R. § 1.132  
OF DONG TIAN**

1. I, Dong Tian, am a citizen of the People's Republic of China, and my residence and post office address is 2190 Butter Road, Lancaster, Pennsylvania 17601.
2. I received my B.S. in Chemistry in 1986 from Fudan University, Shanghai, China.
3. I received my M.S. in Polymer Physics in 1992 from Fudan University, Shanghai, China.
4. I received my PhD in Polymer Chemistry in 1997 from the University of Liege, Liege, Belgium.
5. I completed a one year post doctorate in 1998 at Arizona State University, Tempe, Arizona, working in new monomer and polymer chemistry.
6. I was employed by Armstrong World Industries, Inc., Lancaster, PA from 1998 to 2001 as a Research Scientist and from 2001 to the present as a Senior Research Scientist in Floor

Products Research at Lancaster, PA, on projects involving process improvement, new product development and cost reduction of residential and commercial sheet and tile products, particularly relating to coatings on vinyl flooring.

7. I am the applicant in the above-identified patent application and inventor of the subject matter claimed in that application.

8. I have first-hand experience with the manufacture of flooring. I am also familiar with the Ruske U.S. Patent No. 3,909,471 reference enclosed herewith.

9. The invention claimed in the present application relates to a waterborne coating composition comprising an aqueous dispersion of polyurethane resin particles, epoxy resin particles and certain specified polyvinyl chloride resin particles.

10. Ruske is directed to a specified pigment that is used to color various surface coatings and plastics. Ruske discloses coloring thermoplastic materials such as polyvinyl chloride. He also discloses coloring other plastics including various resins such as epoxy resins and polyurethane resins, and surface coatings that contain one or more of the resins in an organic solvent or in the form of an aqueous organic emulsion.


11. Polyvinyl chloride, including the homopolymer and copolymers disclosed by Ruske at column 1, lines 19 to 28, are made by emulsion polymerization, or suspension polymerization or solution polymerization. After polymerization, these forms of polyvinyl chloride must be dried, e.g. using a vacuum spray process to remove water or solvent, before the polyvinyl chloride can be used as thermoplastic. After drying, the thermoplastic polyvinyl chloride cannot be re-dispersed into water without involving in a chemical reaction/process. Therefore, Ruske does not teach or suggest an aqueous polyvinyl chloride dispersion or an aqueous dispersion comprising polyvinyl chloride.

12. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United

States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

5/19/2004  
Date

  
Dong Tian

Armstrong World Industries, Inc.  
P.O. Box 3001  
Lancaster, PA 17604  
(717) 396-4070 (Telephone)  
(717) 396-6121 (Facsimile)

**Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, PO Box 1450, Alexandria, Virginia 222313-1450 on: 5/20/04

April L. Fiedler